AGS MAINTENANCE, MODIFICATIONS, AND REPAIRS SCHEDULE

R. Zaharatos - March 30, 1999 Rev. 1

SCHEDULE SUMMARY

Maintenance/SHUTDOWN Period - Begin: March 31, 1999 2330hrs.
End: April 30, 1999 1630hrs.

Machine Areas Access	AGS	- Restricted Access -	April 5, 1999 to end of shutdown
	Booster	- Restricted Access -	April 5, 1999 to end of shutdown
	Linac	- Restricted Access -	April 5, 1999
	TTB	- Restricted Access -	April 5, 1999 to end of shutdown
	All SEB	- Restricted Access -	April 6, 1999
	U Downstream/U Berm	- Restricted Access -	March 29, 1999 to end of shutdown
	ATR/RHIC	- Restricted Access -	April 5, 1999
	W/X/Y Lines	- Locks removed -	March 29, 1999 to end of shutdown

AGS RING POWERED TESTING REQUESTS

(Proposed schedule – Four hours of testing on first normal work day of shutdown)

1. Run L10 KEK Cavity CW.(4hrs.)
2. A5 Kicker.
3. Gamma TR @G17.

AGS RING POWERED TESTING PRIOR TO START-UP

1. All magnets heat run.

BOOSTER RING POWERED TESTING REQUESTS

1. B3 PA.
2. Band II Cavities following 400KHZ modification.

PRIMARY JOBS

AGS Complex Activated Water Systems to be Drained and Refilled with Clean Water

Scheduled in following order:

1. AGS Main Magnet
2. AGS Fast Quad, RF Cavity, RF PA, and F10.(Also Chilled Water Sys. if approved)
3. Booster Magnet/Ampl. and Booster RF Cavity
4. AGS SEM
5. G-2 System(919)
6. C Line Special Cooling
7. Linac Xport and BLIP

AGS RING EQUIPMENT

1. Drain all activated water-cooling systems and replace with clean water.
2. Repair A20 Flying Wire motions arm.
3. Repair/replace sump pumps at South Gate, C14, and HEBT.
4. Rebuild E15 and C5 IPM vacuum systems.
5. Replace rotating assemblies on all three Main Magnet water pumps.
6. Examine Siemen’s Generator rotor welds.
7. Replace RF P.A. flow meters

SEB Switchyard:

1. HI instrumentation set-up
2. Find and repair vacuum leak.

AGS EXTERNAL EQUIPMENT

1. Route all five fan house condensate pump outs to sanitary and install spill protection alarms.
2. Fan House B power distribution system maintenance and replacement.
3. Repipe cooling Tower 1 in experimental area.
4. Drain and refill SEM water system.

BOOSTER RING EQUIPMENT

1. Replace P.A. blowers in E6, A6, A3, and B3.
2. Modify Band II Cavities to run at 400KHZ.
3. Replace BTA beam current monitor bellows (requires bake-out).
4. Replace foils in BTA Foil Stripper.
5. Sublimate entire ring.
6. Repair BPM's.
7. Repair argon leak for radiation monitor system.
8. Repair Sector Valve B-2(not closing).
9. Drain all activated water cooling systems and replace with clean water.

BOOSTER EXTERNAL EQUIPMENT

1. Modify Horz. And Vert. Quad P.S.'s with soft start ckt..

LINAC(scheduled shutdown)

1. HEBT 2 and 3 – replace all ion pumps

SEB

1. C and D Separator vacuum pumps maintenance.
2. A Line set-up for Exp. 947.
3. Drain activated water from C Line Special Cooling and refill.

ATR/U Line/W Line

1. Replace USV8 Sector Valve
2. Replace beam pipe in sector W-2.
3. Install UGE1 Pass video.
4. Set-up Exp. E933.
5. ATR video tie-in to MCR.
6. ATR – Completion of Video Profile Mon. Sys. at XF1 and XF2.
7. Beam transport equipment checkout (EAG).
8. Proton Radiography Exp. construction and set-up(EAG)

RHIC

1. Install and test Abort Kickers
2. Injection Kicker test.
3. Continue construction of beam scraper sys.
4. Completion of TC Array Sys. for Beam Dump.

G-2

1. Perform maintenance on all turbo pumps, gauges, valves, and DIP elements.
2. Drain activated water systems and refill.

DETAILED SCHEDULE

Note: MCR will be manned until 1630hrs, Thursday April 1, 1999

Wednesday, March 31, 1999

2330 - Exp. Program off.

Thursday, April 1, 1999

0001 - All AGS Ring, Booster, and SEB equipment set to off
- Run all SEB and Ring flags to center line.
- Booster Restricted Access LOTO – Maintain Controlled Access status
- AGS Restricted Access LOTO - Maintain Controlled Access status

0800 - Begin detailed HP surveys of AGS and Booster Rings including job specific surveys.
- Continue shutdown LOTO for all areas (excluding equipment to be tested).

1030 - Begin completion of work planning and approval of permits.

1300 - AGS Ring Cont. Access equipment testing
- Booster Ring Cont. Access equipment testing
- HP surveys of U Line Upstream as required for Restricted Access
- HP surveys of SEB (Switchyard 1st) as required.

1700 - All equipment testing ends.

Friday, April 2, 1999

0800-1200 - Completion of High Rad. Areas work permits and/or equipment testing as required.

1500 - AGS Ring Restricted Access
- Booster Ring Restricted Access

Monday, April 5, 1999

0800 - Major shutdown work begins
- Cooling Tower 1 off line.

Friday, April 30, 1999

1630 - Projected end of shutdown

Monday, May 3, 1999

0800 - Booster/AGS turn-on for HI NASA set-up

Monday, May 10, 1999

0800 - Begin Hip for NASA Exp.

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Access Controls: D. Meany (Ext. 5329, [0361], A. McGeary (Ext. 2053 [0554]

For Maintenance Period April 1, 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	V Target Gate	4	Relocate V Target sweep station from 921 to V target gate box	HP Survey	RWP
2	North Conjgate	8	Install electric strike in place of slide bolt	HP Survey	RWP
3	RHIC Pass Testing	-----	Continue RHIC Pass Testing	-----	-----
4	ACS cage 911B	4	Add opto to Booster Interface for Testing Purposes	-----	-----

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Beam Components: D. Lehn (Ext. 4542) [4276], T. Russo (Ext. 7330) [4201]

For Maintenance Period April 1, 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	BTA	2	Remove and repair CuC foil stripper	HP,VAC	N/A
2	SWYD	16	Misc flag repairs (see instrumentation list)	HP	N/A
3	AGS ring	4	Replace F-5 D/S bellows – Assist VAC group	HP,VAC	N/A
4	C&D lines	40+	Separator vac pump maintenance	HP	N/A
5	AGS	2	HV connections – check oil levels (splitters, H-20)	HP	N/A
6	AGS/Booster	8	Documentation	HP	N/A

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Controls: K. Kohler (Ext. 3917), B. Oerter (Ext. 2799)

For Maintenance Period 4/1/99 through 5/7/99

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	914	4 -- 4/2/99 AM	Check Eurocrate chassis F3 PS for possible broken wire in datacon		
2	914,930A,930UB, 929,Siemens,A10,E 18,H10,911B, L118A,Talcove HITL,12,&3,F10 and multipole rm	4/5/99 to 4/9/99	Check chassis cooling fans and replace as needed		
3	EAG	40 -- 4/5/99 to 4/12/99	Installation proton radiography controls		
4	B target area	24 -- 4/12/99 to 14	Service SXB.B_TGT controller display MUX		

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Electrical Power Distribution–D. BASTEDO (EXT 2555,BP 0274), A. Soukas (4735,BP 0310)

For Maintenance Period April 1 – May 10, 1999

JOB#	ACCESS TO	EST HRS	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	Fan House B	3 days	Maintenance of electrical distribution system 120/208V and 480 v. Note: Partial power shutdown in AGS ring and Fan House "B" during maintenance. Dates to be determined by availability of electricians		

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: INSTRUMENTATION – D. Lehn Ext. 4095[4276], T. Russo Ext. 7330[4201]

For Maintenance Period April 1 – May 7, 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
			(POL. PROTON SETUP)		
1	AGS Ring	8	UXF1 – Inspect Current Transformer – Test and Repair as necessary. Possibly 2 permits depending on fix.	HP-Survey	
2	AGS Ring	4	UF1 Video – Run cables in for backup system (Fiber/ 2 Coax) – Replace camera and setup optics	HP-Survey	
3	AGS Ring	2	H10 Video – Swap out mount with new version and realign camera.	HP-Survey	
4	AGS Ring	8	IPM–E15 (vertical) – repair CO_2 gas lines -remove,rebuild,reinstall & test servo. C5(horizontal)-remove, rebuild,reinstall & test servo. –replace transducer/display for CO_2.	HP-Survey Vacuum Group	
5	AGS	???	AGS Vacuum System – All work external to ring Repair Ion Pump Power Supplies–as time permits List to follow if any work is done		
6	Booster	???	Booster Vacuum System-all work external to ring Repair Ion Pump Power Supplies-as time permits List to follow if any work is done		
7	Booster	.5	Booster Vacuum System – replace all air filters in control racks.		
8	Booster	1	Booster Vacuum System – Measure all GP3-03 Grid voltages.		
9	Booster	48	Setup and support of BTA Bakeout if beampipe completed. BTA Foil Stripper work if Bake is to be done.	HP–Survey Vacuum group	
10	U-Line U/S	8	UF2-Inspect fiber optics-repair as necessary Replace camera and setup optics UF3-Reinstall camera and setup optics	HP-Survey	
11	U-Line D/S	4	ATR Vacuum System – Repair USV8 vacuum valve indicators.	HP-Survey	

12	AGS ring	16	A20 Flying Wire – repair 1 plane of motion (arm loose)	HP-Survey
13	HITL	8	Hook up new cables for Current Transformer	
14	W-Line	1	Put back all Beam Loss Monitors after beampipe goes back.	Vacuum Group
15	U-Line U/S	4	UGE1 Pass video system – Hook up and test cameras, monitor and modulators back to MCR	EAG electricians
16	U-Line D/S	16	E933 setup – Details to follow.	
17	Booster	4	TTB station 29/141 – Repair Integrator problems	HP-Survey
18	HEBT	4	TTB Station 29/90 – Repair Integrator problems	HP-Survey
19	SWYD	30mn	AF124 – Replace camera and setup as necessary	HP-Survey
20	SWYD	8	AF171 – Replace Flag material and holder	HP-Survey EAG
21	SWYD	8	AF238-Replace Flag material and holder. Replace camera and setup as necessary	HP-Survey EAG
22	A-Line A3-Line	60	E947 Setup – Detailed list to follow	
23	RHIC	???	Completion of TC Array System for BEAM DUMP	
24	RHIC	???	Completion of BLM System for Ring and X-LINE.	
25	RHIC	???	Completion of BCM System.	
26	RHIC	???	Beam Scraper System – Continue construction	
27	ATR	???	ATR Video tie in to MCR (real time video) from 1000P	
28	SWYD	16	Complete remote hookup for lights and neutral density filters for CF157	
29	SWYD	80	Crossover and test all appropriate instrumentation for Heavy Ions	
30	ATR	8	Completion of Video Profile Monitor System at XF1 and XF2.	

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: LINAC – B. Briscoe Ext. 5007,5010, [4225], J. Alessi Ext. 7563

For Maintenance Period Summer 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	None	4	All LCS scopes for calibration	Back Maint	None
2	None	20	Ck all vacuum I/L preinjector & LEBT	Back Maint	None
3	None	120	Clean all HV terminals	Back Maint	None
4	None	120	Fix all leaks N2 in driver & 7835	Back Maint	None
5	None	40	Check operation of all RF air switches	Back Maint	None
6	None	20	Backflush LEBT quads and solenoids	Back Maint	None
7	None	40	Check calibration of 7835 FIL leads	Back Maint	None
8	None	40	HIPOT 7835 anode filters	Back Maint	None
9	None	40	Flush and clean all RF strainers	Back Maint	None
10	None	40	Calibrate RF amp and phase system	Back Maint	None
11	None	80	Modify all 8618 grid connections	Back Maint	None
12	None	40	Backflush all capbank iggys	Back Maint	None
13	None	40	Check all accel status I/L include vac	Back Maint	None
14	None	40	Check all pulsing logic ckts	Back Maint	None
15	None	40	Check operation of counters and zero	Back Maint	None
16	None	20	Check all screen resistors	Back Maint	None
17	None	330	Linac RF Maintenance	None	None
18	None	260	Linac miss RF Maintenance A – L	None	None
19	None	150	Linac miss RF maintenance M – X	None	None
20	None	100	Linac preinjector maintenance	None	None
21	None	16	Linac chopper maintenance	None	None
22	None	100	Linac control room maintenance	None	None
23	None	640	Linac quad and mag maintenance	None	None
24	None	40	Linac vacuum maintenance	None	None
25	Tunnel	8	Change power supply for pol xfmrs	None	Yes
26	None	80	Put tank ion pumps on control system	None	None

27	None	40	Install controls for resetting ion pumps	None	None
28	None	40	Complete installation of new ss chopper	None	None
29	None	40	Put flow switches on iggy water	None	None
30	None	120	Rehose and new flow switches on drivers	None	None
31	Tunnel	20	Install new feed loops for test	None	Yes
32	Tunnel	120	Complete tank alignment	Survey	Yes
33	None	120	Add new MALF bucket to BLIP and rewire	None	None
34	None	2	Set Mod8 7835 input tuning limits	None	None
35	BLIP	80	Complete BLIP rabbit work	None	Yes
36	Tunnel	20	Add shielding after NZ307	None	Yes
37	None	16	Make new RFI screen for Mod 10 driver	None	None
38	None	40	Check and recalibrate Linac LRM system	None	None
39	Linac	80	Complete repair of 3 failed BPM modules	None	Yes
40	Tunnel	16	Leak check all Linac LRM systems	None	None
41	Linac	120	Complete building, test and install 5 BPMs	None	Yes
42	HEBT	40	Repair BLIP 1st multi wire	None	Yes
43	Tunnel	40	Replace ion pump in tank 9	None	Yes
44	BLIP	8	Repair cable of BLIP SEM	None	Yes
45	Tunnel	40	Check tank 8 for sparking and replace pump	None	Yes
46	Tunnel	40	Check tank 4 for sparking	None	None
47	None	200	Modify 7835 input tuner with Fermi design	None	None
48	None	4	Change HEBT and BLIP local controls	None	None
49	None	20	Check and reset all Linac local controls	None	None
50	None	16	Install local remote switches in ICR	None	None
51	None	80	Complete construction of SS modulators	None	None
52	None	160	Design and build 6 inter tank BPMs	None	None
53	None	120	Complete development of cal test set BPM	Gassner	None
54	None	160	Install and test linac timing system	None	None
55	None	40	Complete final PLC test in Mod 10	None	None
56	None	320	Install PLC code into Mod 5	None	None
57	None	20	Check and replace bad fans in VME chassis	None	None
58	None	40	Replace switches and pots in tank water cont	None	None
59	None	80	Install ACME supply for HEBT 2 quad	None	None
60	None	40	Check AC phase of all 7835 tuners for mod	None	None
61	None	40	Check all driver braids and clean paint	None	None
62	None	120	Add water cooling to 7835 supplies	None	None

63	None	80	Add flow switch interlock to 7835 water	None	None
64	Tunnel	40	Open tank 5 for sparking	None	None
65	None	80	Make new LEBT solenoid	None	None
66	None	80	Run acceptance on CTL 8618S	None	None
67	None	8	Install dr. coax support bracket to 7835	None	None
68	None	40	Put new AC cables on drivers	None	None
69	Tunnel	40	Open tank 7 for sparking	None	Yes
70	None	160	Remove old polarized proton beam line	None	None
71	None	8	Remove LBM1 from LEBT line	None	None
72	None	2K	Install new polarized proton source	None	None
73	None	80	Make new solenoid pulser supply	None	None
74	None	20	Check RFQ1 RF match	None	None
75	None	40	Check bunchers for sparking	None	None
76	None	4	Back flush LEBT solenoids	Pump Room	None
77	None	4	Back flush RFQ1	Pump Room	None
78	None	4	Check water level switch for RF water	Pump Room	None
79	None	160	Remove all old 60 KV supplies	Contracts	None
80	HEBT	40	Help remove and install BM1 chamber	Vacuum	Yes
81	HEBT	40	Repair water leak in NQ17 quad	Vacuum	Yes
82	None	40	Test new current xfmr amp	None	None
83	NEBT	80	Repair broken sem wires at HEBT 5,6,pol	Vacuum	Yes
84	Tunnel	16	Repair TK6 to TK7 interspace	None	Yes
85	None	4	Check LEBT solenoid flow switches	None	None
86	Tunnel	20	Repair TK9 vacuum valve leak thru	Vacuum	Yes
87	None	8	Replace buncher RF feed cables	None	None
88	Tunnel	8	Fix HEBT slit solenoid	None	Yes
89	None	20	Replace all 400 watt RF cables to drivers	None	None
90	None	8	Replace all 7835 up & down relays	None	None
91	None	80	Add fans to 7835 diode stack for breaker	None	None
92	None	8	Install new resistors in driver screens	None	None
93	None	8	Install new test buttons in crowbar 1,2,3	None	None
94	None	16	Change gnd switch gnd in cap bank	None	None
95	None	16	Add spark gap to cap bank low side	None	None
96	None	20	Yearly coax compressor maintenance	None	None
97	Tunnel	20	Complete air flow measurement to feedloops	None	Yes
98	Tunnel	80	Modify coax air manifold for feedloop sup	None	Yes

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Maintenance Coordinator: R. Zaharatos (Ext. 7205,[4281]

For Maintenance Period April 1 – May 10, 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	AGS Ring	6	Clean-up. Mop floor A15-E15	Custodians	RWP
2	AGS Ring	8	Repair/replace sump pumps at South Gate, C14 and HEBT	PE Plumbers	Mini RWP
3	AGS Complex	8 hrs.	Clean-up – empty AGS and Booster rad bins. Remove personal protective clothing.	HP, OPS	
4	Booster		Inspect Booster including plugs for BAF soil sample holes		
5	AGS/Booster		General inspection	CAS	
6	AGS Complex		Distribute new outdoor waste binds	Riggers	

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Mechanical Services: J. deBoer (Ext. 4668 [4250], E. Dale (Ext. 7943 [0124] B. Abel (Ext. 5711 [7119]

For Maintenance Period April 1 – May 10, 1999

JOB#	ACCESS TO	Time Per Required	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	911		Install control valve for domestic water to main magnet heat exchanger	PE	
2	913	4 wks	Drain all hot cooling systems into tankers and replace with clean water	None	
3	Fan Houses / 913	4 wks	Install condensate pumps in fan houses and pipe through ring to escape hatches	PE	
4	911	4 wks	Replace rotating assemblies on all three Main Magnet pump and install new seals	None	
5	911	1 wk	Install new elbows on all three main magnet pumps	PE	
6	912	2 wks	Remove and repipe cooling tower 1 piping in the experimental building	PE	
7	911 roof	1 wk	Install 3-way valve on 911 AC tower	PE	
8	911	1 wk	Replace 911 di with new unit in pump room for main magnet cooling system	PE	
9	18 houses	1 wk	Install new relief valves in the 18 houses	None	
10	Booster	2 days	Repair argon leak for booster radiation monitor system	None	
11	929	1 wk	Repair sem cooling system evap. cooler leaks	None	
12	Te bldg	2 days	Fix leaks on fast pulse quad cooling system heat exchanger	None	
13	913	1 wk	Replace rfpa flow meters in ring	None	

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Operations Support: R. Zaharatos (Ext. 7205 [4281], A. McNerney (Ext. 7693 [4222]

For Maintenance Period April 1 – May 10, 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	AGS Complex	2 wks	DICOM SYS. Maintenance – battery pks. And repair 1 recvr. Install RHIC exp. Alarms		
2	MCR	2 days	Install BLIP beam off alarm reminder Install new P.S. for beam alarm system		
3	911	2 wks	Signal Distribution System Maintenance		
4	911		Clean-up – Second floor terminal rm and assembly area.		
5	929	1 wk	AGS DCCT Mon. Sys. – reconfigure mux monitoring system and order chamber shorts to replace fatigued units and for spares.		
6	Booster	2 wks	Repair BPMs		
7	West Hse.	4 wks	Assist PS Group with maintenance and West Hse. construction		
8	929	4 wks	Assist RF group with projects		
9	911	1 wk	CAS Group training (see updated list of required training)		
10	911/OLDF	3 days	Relocate OPS shop to CAS shop.		

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Power Supply: M. Bannon (Ext. 7704 [4224], I. Marneris (Ext. 7027 [4255]

For Maintenance Period April - May 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
			BOOSTER		
1			Modify Booster Horz and Vert Quad PS (Inverpower) with soft start circuit		
2			Install in Booster Horz and Vert sextupole PS cubicle fans		
3			Swap out two PLC-2 processors in Booster with PLC-2 spare processors. Check operation to make sure our repaired spares are operational		
4			Replace one marginal fiber optic trans and receiver in BMMPS (PS IIB #346)		
			SIEMENS – MG		
1			Replace elephant trunk on exhaust air of motor brush – Rigging		
2			Check new 95 switches finger contacts for any signs of overheating or arcing		
3			Inspect old 95 switches for any oil leaks		
4			Check out oil filters for MG set for babeth		
5			Open up one of newly painted radiator of Motor-Gen (new white epoxy painted)		
6			Examine Generator – Rotor welds using boroscope		
7			Inspect naughahide air chamber in Motor pit		
8			Dismantle brush rigging of motor. Clean entire area and repaint with cream color paint.		
9			Redo SS plumbing on Ped #2 used for transducer		
10			Inspect and lubricate Siemens C.B. 52, 52R, 19S, 19R		
11			Check out C.B. 52 G for the # of operations and for wear.		
12			Measure pedestal resistance to ground		
13			Inspect glass insulators out in Siemens trans yard		

14		Inspect 52 G area for link connection from Westinghouse Motor-Generator
15		Do random bolt torque inspection on M.G. Set
16		Check the over-current relay protection calibration on Siemens relays. If due, have line crew do calibration check.
		AGS
1		Check F10 Meaker P.S. fan belts for dryness and crack – replace if necessary
2	All	(UPS) – all battery maintenance checks. (Do biddle impedance check of batteries)

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Pulsed Power: R. Zapasek (Ext. 2189 [4263], R. Sanders (Ext. 2591 [4228]

For Maintenance Period April 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	AGS	4	A5 KICKER, Inspect PFNs, will need test time A. ZHANG		RWP
2	Booster	4	F3 KICKER, Inspect PFN A. ZHANG		RWP
3	Booster	.5	F6 SEPTUM, Inspect Magnet Fan R. LOCKEY		RWP
4	PP Houses Fan Houses	2	GAMMA TRs, Inspect and re fuse system A. DUNBAR		
5	PP House	4	GAMMA TR, TEST regulator board A. DUNBAR		
6	RHIC	CONT	ABORT KICKERS, Install and TEST A. DUNBAR		
7	RHIC	CONT	INJECTION KICKER, TEST A. ZHANG		
8	G18 House	16	GAMMA TR, Repair and TEST G17 A. DUNBAR		

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: RF: N. Laloudakis (Ext. 7177, 7417 [4261], A. Zaltsman (Ext. 2967[4259]

For Maintenance Period March 9 - 12, 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
			AGS		
1	AGS Ring		Run L10 KEK cavity CW – 4 hr test	No	HP
2	AGS Ring	1 day	Modify D10 PA to be the same as others	No	HP– (CP)
3	929		Set up Low level RF	No	No
			BOOSTER		
1	Booster Ring		Repair B3 PA (diagnose problem and fix) – test required	Pump Room	HP-(CP)
2	Booster Ring	5 days	Replace all blowers (E6,A6,A3,B3)	Pump Room	HP-(CP)
3	Booster Ring		Modify band II cavities to run at 400 KhZ	No	HP-(CP)
4	914		Set up low level RF	No	HP

AGS MAINTENANCE, REPAIR AND MODIFICATION PROGRAM

JOBS SCHEDULING REQUEST

GROUP: Vaccum – S. Gill (Ext. 4627 [4164], M. Mapes (Ext. 2841 [4277]

For Maintenance Period 4/1/99 to 5/7/99, 1999

JOB#	ACCESS TO	EST. HRS.	JOB DESCRIPTION AND RESPONSIBLE PERSON	ADD'L. SUPPORT	HP SURVEY
1	Booster	40	Vent BTA, remove and replace beam pipe/bellows ass'y @ beam current monitor, pump down, leak check, bake	HP-survey	
2	Booster	40	In conjunction with job #1 – replace foils in foil stripper	Beam components	
3	U-line	16	Vent sectors W-1 and Neutron Spallation, replace USV8 sector valve and Neutron Spallation piranni gauge, test components, pump down and leak check both sectors, restore vacuum integrity	Instrumentation -valve indicators HP-survey	
4	HEBT line	24	Vent HEBT 2 and HEBT 3, replace all ion pumps, replace HEBT 3 turbo pump, pump down and leak check, restore vacuum integrity	HP-survey	
5	G-2	160	Perform maintenance on all turbo pumps, gauges, valves and DIP elements		
6	AGS	16	EITHER replace F-5 SEPTUM OR replace d/s bellows on F5	Beam components HP-survey water (septum swap)	
7	AGS	16	POSSIBLY replace F-7 sextupole magnet	Beam components HP-survey water	
8	AGS	32	POSSIBLY replafe H-20 Septum	Beam components HP-survey water	
9	AGS	24	Vent AB sector for repair of FLYING WIRE	Beam components HP-survey	
10	AGS	40	Perform maintenance on all turbo pumps	HP-survey	

11	AGS	16	Vent E15 IPM box, remove/rebuild/reinstall/test servo motor, restore vacuum integrity	Instrumentation HP-survey
12	AGS	16	Vent C5 IPM box, remove/rebuild/reinstall/test servo motor, restore vacuum integrity	Instrumentation HP-survey
13	Booster	8	Find problem with sector valve B-2 not closing	Instrumentation HP-survey
14	Booster	8	Sublimate entire ring	HP-survey
15	Booster	8	Take RGA scans of entire ring (no entry to ring should be needed)	HP-survey
16	Booster	8	Check status of all RGA boxes in ring	HP-survey
17	Booster, BTA,LTB	8	Check status of all NEG strips	HP-survey
18	W-line	8	Replace beam pipe in sector W-2	HP-survey
19	AGS	8	Check/repair all sector valve cable strain reliefs for radiation damage	HP-survey